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Trematodes from insectivorous mammals in the Čergov Mountains (Western Carpathians, Czechoslovakia)*

By

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ABSTRACT. Rubenstrema exasperatum, Brachylaemus fulvus and Skrjabinophyetus soricis were found to infest Sorex araneus in the Čergov Mts; Maritrema carpathica sp.n. is described from Neomys fodiens.

I studied trematods from 58 specimens of insectivores captured between 1980 and 1983 in the Čergov Mts: Sorex araneus Linnaeus, 1758 37 specimens, S. minutus Linnaeus, 1766 5, S. alpinus Schinz, 1837 7, Neomys fodiens (Pennant, 1771) 8 and N. anomalus Cabrera, 1907 1 specimen. In S. minutus, S. alpinus and N. anomalus trematodes were absent, those found in S. araneus and N. fodiens are described below.

PLAGIORCHIIDAE

Rubenstrema exasperatum (Rudolphi, 1819)

Host: Sorex araneus. - Localization: esophagus, stomach. - Intensity: 3-7 specimens.- Date of collection: Lenartov 10-12 Nov., 1982 (2 cases).

BRACHYLAEMIDAE

Brachylaemus fulvus Dujardin, 1843

Host: Sorex araneus. - Localization: esophagus, stomach, intestinum tenue. - Intensity: 3-8 specimens. - Date of collection: Hertník 26-28 Aug., 1980 (9 cases).

NANOPHYETIDAE

Skrjabinophyetus soricis Jourdane, 1973

Host: Sorex araneus. - Localization: intestinum tenue. - Intensity: 1 specimen. - Date of collection: Lenartov 10-12 Nov., 1981 (1 case).

MICROPHALLIDAE

Maritrema carpathica sp.n. (Fig. 1)

Host: Neomys fodiens. - Localization: intestinum tenue. - Intensity: 3 specimens. - Date of collection: Lenartov, 10-12 Nov., 1981 (1 case).

Description: Body very small, as wide as long, measuring 0.225-0.227 mm in length with a maximal breadth of 0.224-0.225 mm. Body broadly rounded posteriorly. Tegument covered with fine spines. Oral sucker subterminal, rounded, 37.5-39 x 37.5-38 μm. Acetabulum situated in middle of body, 37.5-38 x 40-42.5 μm. Oesophagus bifurcating in front of

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ventral sucker into two narrow caeca. Caeca terminating at level of acetabulum. Testes ellipsoid, situated symmetrically behind acetabulum, measurements 17-18 x 11-15 µm, 42.5-45 x 30-37.5 µm, respectively. Cirrus sac situated in front of acetabulum. Vesicula seminalis present. Ovary ellipsoidal in shape, 22-23 x 12-14 µm, situated in mid-body region at level of acetabulum. Uterus passing between the two testes, relatively short, terminating in the metraterm. Genital atrium present, situated lateral to acetabulum. Eggs 6-7.5 x 13-15 µm, brownish, with operculum. Excretory vesicle V-shaped. Vitellary glands not constituting complete ring.

The type specimens are deposited in the Parasitological Collection of the Hungarian Natural History Museum, Budapest.

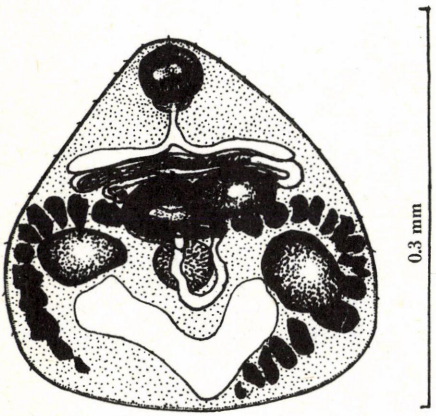

Fig. 1: Maritrema carpathica sp.n.

Note. The majority of the species of the subfamily Maritrematinae are parasites of birds. Nine species have been described from mammals (LEWIS, 1966). A comparison of Maritrema species originating from mammals is given in LEWIS (loc.cit.). He described a Maritrema species from Apodemus sylvaticus, collected in the Skomer Islands (United Kingdom), under the name M. apodemicum. LEWIS discussed a Maritrema species from the intestine of Crocidura suaveolens captured in the Scilly Isles. This species was not described correctly and it was discussed as "Maritrema sp."

Maritrema carpathica sp.n. occurring in Neomys fodiens is closely related to Maritrema sp. from the white-toothed shrew and to M. apodemicum from the long-tailed fieldmouse, but differs from these species in the size and measurements of the body, the situation of vitellaria (incomplete ring), and in the position of the male and the female genital organs.

REFERENCES

DIMITROVA, E. & GENOV, T. (1967): Skrjabinophyetus neomydis gen. et sp. nov. (Nanophyetidae Dollfus, 1939) from Neomys fodiens Sch. in Bulgaria. - Helminthologia, 8: 113-116.

JOURDANE, J. (1973): Deux nouvelles espéces de Trématodes parasites des Sorocinae dans les Pyrénées. - Ann. Parasit. hum. comp., 48: 667-776.

JOURDANE, J. & TRIQUELL, A. (1973): Digénées parasites d'Apodemus sylvaticus (L.) dans la partie orientale des Pyrénées. Description de Macyella apodemi sp.n. - Bull. Mus. natn. Hist. nat., Paris, 91 (No.117): 351-361.

LEWIS, J.W. (1966): Maritrema apodemicum sp. nov. (Digenea: Microphallidae) from the long tailed field mouse, Apodemus sylvaticus sylvaticus (L.) on Skomer Island. - J. Helminth., 40: 363-374.

MATSKÁSI, I. (1970): The occurrence in Hungary and the systematical problems of two species of the genus Rubenstrema Dollfus, 1949 (Trematodes). - Parasit. hung., 3: 23-32.

ZARNOWSKI, E. (1960): Parasitic worms of forest micromammalians (Rodentia and Insectivora) of the environment of Pulawy (district Lublin). II. Trematoda. - Acta parasit. pol., 8: 127-168.

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